



RESPONSE UNDER 37 CFR 1.116  
EXPEDITED PROCEDURE

IN THE U.S. PATENT AND TRADEMARK OFFICE

March 1, 2011

Applicants: Horst GLATZ et al

For: METHOD FOR THE ECONOMICAL PRODUCTION OF  
HEAT EXCHANGER TUBES BENT IN A U-SHAPE

Serial No.: 10/539 955                      Group: 3726

Confirmation No.: 8659

Filed: June 17, 2005                      Examiner: Chang

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION UNDER 37 CFR 1.144**

STATEMENT OF FACTS

This Petition Under 37 CFR 1.144 is being filed to have the Director overturn the Examiner's decision in the Office Action dated November 2, 2010 to withdraw Claims 19-23 from consideration as being directed to an invention which was non-elected by original presentation.

Step c) in originally filed Claim 1 required the annealing and subsequently cooling of a drawn tube material before or after cutting, for separation into tube portions, to the starting length for a tube bent in a U-shape. No election of species was made by the Examiner requiring Applicants to choose whether the annealing and subsequent cooling of the drawn tube material is performed before or after the cutting.

A Restriction Requirement was mailed from the Patent Office on April 1, 2009 in which Applicants were required to select an invention from Group I, claims 1-9, drawn to a method, Group II, claims 10-15, drawn to a production line and Group III, claim 16. The Examiner also required an election of species with Species 1 being shown by Fig. 1, Species 2

being shown by Fig. 2, Species 3 shown by Fig. 3, Species 4 shown by Fig. 4 and Species 5 shown by Fig. 6. Claims 2-5 were deemed as corresponding to Species 1.

A Response to the Examiner's Restriction Requirement was mailed on April 7, 2009 in which Applicants elected Group I, claims 1-9 and Species I, Figure 1, with traverse.

On May 22, 2009, the Examiner issued an Office Action in which Claims 1-5 were rejected.

On August 20, 2009, Applicants mailed a Response to the Office Action in which Claim 1 was replaced by Claim 17 which still contained the limitation that the drawn heat-exchanger tube material was cut either before or after annealing and subsequently cooling the drawn heat exchanger material.

On December 8, 2009, the Examiner issued a final rejection rejecting Claims 2-5 and newly presented Claim 17.

An Amendment After Final Rejection was filed by Applicants on March 3, 2010 in which the limitation of cutting the drawn heat-exchanger tube material to form tube portions of a desired length either before or after annealing and subsequently cooling the drawn heat exchanger tube material was still present in Claim 17.

On March 22, 2010, an Advisory Action was mailed by the Examiner in which he indicated that the Amendment After Final Rejection would not be entered because it raised new issues and did not place the instant application in better form for consideration on appeal.

A Request for Continued Examination was filed by Applicants on March 30, 2010 in order to get the Amendment After Final Rejection entered into the record.

On July 30, 2010, a subsequent Office Action was issued by the Examiner maintaining the rejection of the claims.

On October 1, 2010, Applicants filed another Response in which the limitation with respect to cutting the drawn heat-exchanger tube material to form tube portions of a desired length either before or after annealing and subsequently cooling the drawn heat exchanger tube material was placed in

newly presented Claims 18, which required that the drawn heat exchanger tube material be cut after the formation of a recrystallized state by annealing and subsequently cooling the drawn heat exchanger tube material, and 19 in which the drawn heat exchanger tube material is cut and then a recrystallized state formed in the tube portions by annealing and subsequently cooling the tube portions.

On November 2, 2010, the Examiner mailed a final rejection in which Claims 19-23 were withdrawn from consideration as being directed to an invention that was independent or distinct from the invention originally claimed. The Examiner stated that the Applicant had received an action on the merits for the originally presented invention and so that this invention has been constructively elected by original presentation for prosecution on the merits and, accordingly, Claims 19-23 were withdrawn from consideration.

On February 1, 2011, an Amendment After Final Rejection was filed by Applicants in which it was requested that the Examiner reconsider the withdrawal of Claims 19-23 from consideration based on originally presented Claim 1 stating in step c) that the annealing and subsequent cooling step is either before or after cutting. Since this language was in the originally presented claims which were subjected to a first Office Action without a Restriction Requirement by the Examiner, Claims 18 and 19 were clearly supported by Claim 1 and not subject matter presented for the first time when Claims 18 and 19 were added to the prosecution of the present application.

On February 16, 2011, the Examiner issued an Advisory Action in which it was stated that the Request for Reconsideration was considered and entered but did not address Applicants request for reconsideration of the withdrawal of Claims 19-23 from consideration due a constructive election by original presentation.

On February 23, 2011, Applicants' representative called Examiner Chang to verify that the constructive election by

presentation was still being maintained. Examiner Chang told Applicants' representative that the constructive election by original presentation was still being maintained because the Examiner chose to examine the drawn heat-exchanger tube material being cut after the annealing and cooling step and this precluded the Applicants from claiming the cutting of the drawn heat-exchanger tube material prior to the annealing and cooling step. Applicants pointed out that an election of species was not required with respect to this feature of the claimed invention but the Examiner said that it did not matter since he chose to examine the cutting of the tube material after the annealing and cooling step.

RELIEF REQUESTED

Applicants respectfully request that the Examiner be directed to examine Claims 19-23 and withdrawn his constructive election by original presentation of these claims. Favorable consideration is respectfully solicited.

The Commissioner is hereby authorized to charge any petition fee which may be required by this paper to Deposit Account No. 06-1382.

Respectfully submitted,

  
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Reg. No. 42 094  
Reg. No. 24 323  
Reg. No. 25 072  
Reg. No. 24 949

Encl: Originally Presented Claim 1  
Claims 17-23  
Postal Card

Original Claim 1

1. Method for the manufacture of tubes (20) bent in a U-shape from a nonferrous metal, immediately following a tube-production line, having the consecutive steps of:

- a) uncoiling the drawn tube material (1) from a storage device (2),
- b) straightening the drawn tube material (1),
- c) annealing and subsequently cooling the drawn tube material (1) before or after cutting, for separation into tube portions (10), to the starting length for a tube (20) bent in a U-shape,
- d) bending the tube portions (10) into a U-shape.

Claims 17-23

17. A method of manufacturing lamellar U-shaped heat-exchanger tubes, comprising the steps of:

producing a drawn heat-exchanger tube material made of a nonferrous metal;

coiling the drawn heat-exchanger tube material horizontally in a round open-top container;

uncoiling the drawn heat-exchanger tube material from the container;

straightening the drawn heat-exchanger tube material;

cutting the drawn heat-exchanger tube material to form tube portions of a desired length either before or after annealing and subsequently cooling the drawn heat-exchanger tube material; and

bending the tube portions into a U-shape to form the lamellar U-shaped heat-exchanger tubes.

18. A method of manufacturing lamellar U-shaped heat-exchanger tubes, comprising the steps of:

producing a drawn heat-exchanger tube material made of a nonferrous metal;

coiling the drawn heat-exchanger tube material horizontally in a round open-top container;

uncoiling the drawn heat-exchanger tube material from the container;

straightening the uncoiled drawn heat-exchanger tube material;

forming a recrystallized state in the drawn heat-exchanger tube material by annealing and subsequently cooling the drawn heat-exchanger tube material;

cutting the drawn heat-exchanger tube material having the recrystallized state to form tube portions of a desired length; and

bending the tube portions into a U-shape to form the lamellar U-shaped heat-exchanger tubes.

19. A method of manufacturing lamellar U-shaped heat-exchanger tubes, comprising the steps of:

producing a drawn heat-exchanger tube material made of a nonferrous metal;

coiling the drawn heat-exchanger tube material horizontally in a round open-top container;

uncoiling the drawn heat-exchanger tube material from the container;

straightening the uncoiled drawn heat-exchanger tube material;

cutting the drawn heat exchanger tube material to form tube portions of a desired length;

forming a recrystallized state in the tube portions by annealing and subsequently cooling the tube portions; and

bending the tube portions into a U-shape to form the lamellar U-shaped heat-exchanger tubes.

20. Method for the manufacture of heat-exchanger tubes according to claim 19, characterized in that the drawn tube portions are subjected to quality control.

21. Method for the manufacture of heat-exchanger tubes according to claim 19, characterized in that the drawn heat-exchanger tube material is flushed with inert gas.

22. Method for the manufacture of heat-exchanger tubes according to claim 21, characterized in that the inert gas flows counter to the direction in which the drawn heat exchanger tube material is uncoiled.

23. Method for the manufacture of heat-exchanger tubes according to claim 20, characterized in that, after cutting to the desired length, the tube portions are subjected to internal and/or external cleaning.